



3rd
INTERNATIONAL WORKSHOP
ADVANCES IN CLEANER PRODUCTION

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

Cleaner Production Philosophy Applied to Metal Covers Packaging Industry of Seafood

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Abstract

A packaging manufacturer company produces metal covers as part of the package to stow fish. In this process the metal sheets are submitted to a stage where they are cut and it is necessary after-varnishing to avoid any oxidation and a consequent reduction of the package life cycle and food contamination. The pre-existing varnishing process consisted of mixing varnish and hardener by gravity, but it did not allow a total control over the two components. Besides, it was necessary to maintain mechanical agitators working constantly even during weekends and holidays in order to prevent curing inside pipes. As a consequence, the process resulted in residue incrustation in the equipment and pipes, as well as solvent waste and uncontrolled residues destination. Cleaner production philosophy was implemented through installing an air compressed equipment to mix the two-component varnish and control their quantities, what led to a considerable varnish economy even with metal covers production growth. This allowed cleaning pipes and shutting off the equipment after use with no risks of obstruction. Waste control and solvent recycling were implemented and resulted in material economy and product quality.

Keywords: *Cleaner production; Waste reduction; Environmental impact.*
